CLAIMS

1. A gas-discharge tube, comprising a tubular body in which a discharge gas is sealed and a plurality of electrodes, for discharging said discharge gas by applying a voltage to each of said plurality of electrodes, wherein

a recess portion is formed on an external surface of said tubular body, and

at least one electrode among said plurality of electrodes is placed in said recess portion.

2. The gas-discharge tube as set forth in Claim 1, wherein

an inner surface of a region of said tubular body, where electrodes not being placed in said recess portion among said plurality of electrodes are placed, is formed to have a microscopic unevenness, and

a secondary electron emission film is provided at a portion where said microscopic unevenness is formed.

3. The gas-discharge tube as set forth in Claim 1, wherein

electrodes not being placed in said recess portion among said plurality of electrodes are placed on an external surface of the side opposed to said recess portion of said tubular body,

the inner surface of the portion of said tubular body, where said recess portion is formed, is formed to have a protrusion

portion toward the inside, and

a member on which phosphor is arranged is placed at the inner surface of said portion of said tubular body where said protrusion portion is formed toward the inside.

4. The gas-discharge tube as set forth in Claim 3, wherein

an inner surface of a region of said tubular body, where electrodes not being placed in said recess portion among said plurality of electrodes are placed, is formed to have a microscopic unevenness, and

a secondary electron emission film is provided at a portion where said microscopic unevenness is formed.

5. The gas-discharge tube as set forth in Claim 1, wherein said recess portion is a trench extending in the axial direction of said tubular body.

6. The gas-discharge tube as set forth in Claim 5, wherein

an inner surface of a region of said tubular body, where electrodes not being placed in said recess portion among said plurality of electrodes are placed, is formed to have a microscopic unevenness, and

a secondary electron emission film is provided at a portion where said microscopic unevenness is formed.

7. The gas-discharge tube as set forth in Claim 2, wherein

electrodes not being placed in said recess portion among said plurality of electrodes are placed on an external surface of the side opposed to said recess portion of said tubular body,

the inner surface of the portion of said tubular body, where said recess portion is formed, is formed to have a protrusion portion toward the inside, and

a member on which phosphor is arranged is placed at the inner surface of said portion of said tubular body where said protrusion portion is formed toward the inside.

8. The gas-discharge tube as set forth in Claim 7, wherein

an inner surface of a region of said tubular body, where electrodes not being placed in said recess portion among said plurality of electrodes are placed, is formed to have a microscopic unevenness, and

a secondary electron emission film is provided at a portion where said microscopic unevenness is formed.

9. A gas-discharge tube, comprising a tubular body in which a discharge gas is sealed and a plurality of electrodes, for discharging said discharge gas by applying a voltage to each of said plurality of electrodes, wherein

an inner surface of said tubular body is formed to have a microscopic unevenness, and

a secondary electron emission film is provided at a portion where said microscopic unevenness is formed.

10. The gas-discharge tube as set forth in Claim 9, wherein said microscopic unevenness is formed in the axial direction of said tubular body.

11. The gas-discharge tube as set forth in Claim 9, wherein

said electrodes include a first electrode placed in the axial direction of said tubular body, and a plurality of second electrodes opposed to said first electrode via said tubular body and being placed at predetermined intervals parallel to the direction crossing the axial direction of said tubular body, and

said microscopic unevenness is formed at a region where said plurality of second electrodes is placed.

12. The gas-discharge tube as set forth in Claim 11, wherein said microscopic unevenness is formed in the axial direction of said tubular body.

13. A gas-discharge tube, comprising a tubular body in which a discharge gas is sealed and a plurality of electrodes, for discharging said discharge gas by applying a voltage to each of said plurality of electrodes, wherein

an external surface of the region of said tubular body, where at least one electrode among said plurality of electrodes is placed, is formed in a plane shape,

the inner periphery of the cross-section across the axis of said tubular body is formed in a circular shape, and

a secondary electron emission film is provided at an inner surface of said tubular body.

14. A display apparatus in which a plurality of gas-discharge tubes are arranged parallel to each other, each gas-discharge tube comprising: a tubular body in which a discharge gas is sealed; a first electrode placed in the axial direction of said tubular body; and a plurality of second electrodes opposed to said first electrode via said tubular body and being placed at predetermined intervals parallel to the direction crossing the axial direction of said tubular body, so that said discharge gas is discharged by applying a voltage to each electrode, and said second electrodes of adjacent gas-discharge tubes being electrically connected to each other, wherein

a recess portion is formed on an external surface of said tubular body,

said first electrode is placed in said recess portion of said tubular body,

the inner surface of the portion of said tubular body, where said recess portion is formed, is formed to have a protrusion

portion toward the inside, and

a member on which phosphor is arranged is placed at the inner surface of the portion where said protrusion is formed toward the inside of said tubular body.

15. The display apparatus as set forth in Claim 14, wherein

the inner surface of a region of each of said tubular body, where said second electrodes are placed, is formed to have a microscopic unevenness, and

a secondary electron emission film is provided at a portion of said inner surface where said microscopic unevenness is formed.